Ultramicroscopy 33 (1990) 287–288
North-Holland

AUTHOR INDEX TO VOLUME 33

Ahn, C.C., see Krivanek 33 (1990) 177
Arscott, P.G. and V.A. Bloomfield, Scanning tunnelling microscopy of nucleic acids and polynucleotides 33 (1990) 127

Banzhof, H. and K.H. Herrmann, Comparison of surface step images in reflection electron microscopy and scanning reflection electron microscopy 33 (1990) 23
Basinski, M. and J.F. Deatherage, Three-dimensional interactive graphics for displaying and modelling microscopic data 33 (1990) 167
Beltrán del Río, L., see Yacamán 33 (1990) 133
Bethge, H., Introduction to collection of papers dedicated to Prof. J. Heydenreich 33 (1990) vii
Bloomfield, V.A., see Arscott 33 (1990) 127
Butt, H.-J., see Gould 33 (1990) 93

Cantow, H.J., see Gould 33 (1990) 93
Chiu, W., see Prasad 33 (1990) 281
Clarke, J., see Fisher 33 (1990) 117
Coene, W. and D. Van Dyck, Inelastic scattering of high-energy electrons in real space 33 (1990) 261
Cowley, J.M., see Yao 33 (1990) 237

De Blasi, C., D. Manno and A. Rizzo, Convergent-beam electron diffraction characterization of dislocations in GaS single crystals 33 (1990) 143
De Jong, A.F. and D. Van Dyck, Composition determination from HREM images of substitutional alloys 33 (1990) 269
Deatherage, J.F., see Basinski 33 (1990) 167
Degn, L.L., see Prasad 33 (1990) 281
Denley, D.R., Practical applications of scanning tunneling microscopy 33 (1990) 83
Dorset, D.L. and F. Zemlin, Direct phase determination in electron crystallography: the crystal structure of an *n*-paraffin 33 (1990) 227
Drake, B., see Gould 33 (1990) 93

Edstrom, R.D., M.H. Meinke, X. Yang, R. Yang and D.F. Evans, Scanning tunneling microscopy of the enzymes of muscle glycogenolysis 33 (1990) 99
Evans, D.F., see Edstrom 33 (1990) 99

Fisher, K.A., K.C. Yanagimoto, S.L. Whitfield, R.E. Thomson, M.G.L. Gustafsson and J. Clarke, Scanning tunneling microscopy of planar biomembranes 33 (1990) 117
Flynn, C.P., see Mayer 33 (1990) 51

Gómez, A., see Yacamán 33 (1990) 133
Gould, S.A.C., B. Drake, C.B. Prater, A.L. Weisenhorn, S. Manne, G.L. Kelderman, H.-J. Butt, H. Hansma, P.K. Hansma, S. Magonov and H.J. Cantow, The atomic force microscope: a tool for science and industry 33 (1990) 93
Gustafsson, M.G.L., see Fisher 33 (1990) 117

Hansma, H., see Gould 33 (1990) 93
Hansma, P.K., see Gould 33 (1990) 93
Harauz, G., Representation of rotations by unit quaternions 33 (1990) 209
Hawkes, P.W., New books, special issues ... 33 (1990) 215
Herrera, R., see Yacamán 33 (1990) 133
Herrmann, K.H., see Banzhof 33 (1990) 23
Hillebrand, R., see Scheerschmidt 33 (1990) 27
Hopfe, S., see Reiche 33 (1990) 41

Isaacson, M., Preface to scanning tunneling microscopy and related techniques 33 (1990) 65

Jeng, T.-W., see Prasad 33 (1990) 281

Kelderman, G.L., see Gould 33 (1990) 93
Kelly, T.F., see Zreiba 33 (1990) 187
Kelly, T.F., see Zreiba 33 (1990) 199
Krivanek, O.L., C.C. Ahn and G.J. Wood, The inelastic contribution to high resolution images of defects 33 (1990) 177
Kuwabara, M., see Spence 33 (1990) 69

La Barré, S., see Quandt 33 (1990) 15
Lindsay, S.M., see Nagahara 33 (1990) 107
Lo, W., see Spence 33 (1990) 69

Magonov, S., see Gould 33 (1990) 93
Manne, S., see Gould 33 (1990) 93
Manno, D., see De Blasi 33 (1990) 143
Mayer, J., C.P. Flynn and M. Rühle, High-resolution electron microscopy studies of Nb/Al_2O_3 interfaces 33 (1990) 51

Elsevier Science Publishers B.V. (North-Holland)

Meinke, M.H., see Edstrom 33 (1990) 99
Mitome, M., K. Takayanagi and Y. Tanishiro, Improvement of resolution by convergent-beam illumination in surface profile images of high resolution transmission electron microscopy 33 (1990) 255
Mulvey, T. and K. Tahir, Recent developments in electron-optical instrumentation and computer-aided design 33 (1990) 1

Nagahara, L.A., T. Thundat, P.I. Oden, S.M. Lindsay and R.L. Rill, Electrochemical deposition of molecular adsorbates for in situ scanning probe microscopy 33 (1990) 107
Niedrig, H., see Quandt 33 (1990) 15

Oden, P.I., see Nagahara 33 (1990) 107

Prasad, B.V.V., L.L. Degn, T.-W. Jeng and W. Chiu, Estimation of allowable errors for tilt parameter determination in protein electron crystallography 33 (1990) 281
Prater, C.B., see Gould 33 (1990) 93

Qin, L.C. and K. Urban, Electron diffraction and lattice image simulations with the inclusion of HOLZ reflections 33 (1990) 159
Quandt, E., S. la Barré and H. Niedrig, Direct parallel detection of energy-resolved large-angle convergent-beam patterns 33 (1990) 15

Reiche, M. and S. Hopfe, TEM in-situ investigations of the crystallization behaviour of amorphous silicon thin films 33 (1990) 41
Rill, R.L., see Nagahara 33 (1990) 107
Rizzo, A., see De Blasi 33 (1990) 143
Rühle, M., see Mayer 33 (1990) 51

Scheerschmidt, K. and R. Hillebrand, On the calculation of electron microscope images of holes and spherical inclusions using the multi-slice method 33 (1990) 27
Spence, J.C.H., W. Lo and M. Kuwabara, Observation of the graphite surface by reflection electron microscopy during STM operation 33 (1990) 69

Tahir, K., see Mulvey 33 (1990) 1
Takayanagi, K., see Mitome 33 (1990) 255
Tanishiro, Y., see Mitome 33 (1990) 255
Tehuacanero, S., see Yacamán 33 (1990) 133
Thomson, R.E., see Fisher 33 (1990) 117
Thundat, T., see Nagahara 33 (1990) 107

Urban, K., see Qin 33 (1990) 159

Van Dyck, D., see Coene 33 (1990) 261
Van Dyck, D., see De Jong 33 (1990) 269

Wang, Y.Y., Multiple scattering correction by a direct convolution method for electron energy loss spectrum 33 (1990) 151
Weisenhorn, A.L., see Gould 33 (1990) 93
Whitfield, S.L., see Fisher 33 (1990) 117
Wood, G.J., Krivanek 33 (1990) 177

Yacamán, M.J., R. Herrera, S. Tehuacanero, A. Gómez and L. Beltrán del Río, Surface roughness studies in small particles using HREM 33 (1990) 133
Yanagimoto, K.C., see Fisher 33 (1990) 117
Yang, R., see Edstrom 33 (1990) 99
Yang, X., see Edstrom 33 (1990) 99
Yao, N. and J.M. Cowley, Electron diffraction conditions and surface imaging in reflection electron microscopy 33 (1990) 237

Zemlin, F., see Dorset 33 (1990) 227
Zreiba, N.A. and T.F. Kelly, Absorption and fluorescence corrections for X-ray analysis with large-solid-angle detectors: thin films and spheres 33 (1990) 187
Zreiba, N.A. and T.F. Kelly, Experimental determination of the efficiency function of an X-ray detector using submicron spheres 33 (1990) 199

Ultramicroscopy 33 (1990) 289–290
North-Holland

SUBJECT INDEX TO VOLUME 33

Analytical microscopy
Absorption and fluorescence corrections for X-ray analysis with large-solid-angle detectors: thin films and spheres, *Zreiba and Kelly* 33 (1990) 187
Experimental determination of the efficiency function of an X-ray detector using submicron spheres, *Zreiba and Kelly* 33 (1990) 199

Cross sections
Inelastic scattering of high-energy electrons in real space, *Coene and Van Dyck* 33 (1990) 261

Diffraction and optical diffraction
Convergent-beam electron diffraction characterization of dislocations in GaS single crystals, *De Blasi, Manno and Rizzo* 33 (1990) 143
Electron diffraction and lattice image simulations with the inclusion of HOLZ reflections, *Qin and Urban* 33 (1990) 159
Direct phase determination in electron crystallography: the crystal structure of an *n*-paraffin, *Dorset and Zemlin* 33 (1990) 227
Electron diffraction conditions and surface imaging in reflection electron microscopy, *Yao and Cowley* 33 (1990) 237

Electron energy loss spectroscopy
Multiple scattering correction by a direct convolution method for electron energy loss spectrum, *Wang* 33 (1990) 151
The inelastic contribution to high resolution images of defects, *Krivanek, Ahn and Wood* 33 (1990) 177
Inelastic scattering of high-energy electrons in real space, *Coene and Van Dyck* 33 (1990) 261

High resolution
High-resolution electron microscopy studies of Nb/Al_2O_3 interfaces, *Mayer, Flynn and Rühle* 33 (1990) 51
Surface roughness studies in small particles using HREM, *Yacamán, Herrera, Tehuacanero, Gómez and Beltrán del Río* 33 (1990) 133
The inelastic contribution to high resolution images of defects, *Krivanek, Ahn and Wood* 33 (1990) 177
Improvement of resolution by convergent-beam illumination in surface profile images of high resolution transmission electron microscopy, *Mitome, Takayanagi and Tanishiro* 33 (1990) 255
Composition determination from HREM images of substitutional alloys, *De Jong and Van Dyck* 33 (1990) 269
Estimation of allowable errors for tilt parameter determination in protein electron crystallography, *Prasad, Degn, Jeng and Chiu* 33 (1990) 281

Image processing, 3D reconstruction
On the calculation of electron microscope images of holes and spherical inclusions using the multi-slice method, *Scheerschmidt and Hillebrand* 33 (1990) 27
Three-dimensional interactive graphics for displaying and modelling microscopic data, *Basinski and Deatherage* 33 (1990) 167
Representation of rotations by unit quaternions, *Harauz* 33 (1990) 209
Direct phase determination in electron crystallography: the crystal structure of an *n*-paraffin, *Dorset and Zemlin* 33 (1990) 227
Composition determination from HREM images of substitutional alloys, *De Jong and Van Dyck* 33 (1990) 269
Estimation of allowable errors for tilt parameter determination in protein electron crystallography, *Prasad, Degn, Jeng and Chiu* 33 (1990) 281

Imaging
The inelastic contribution to high resolution images of defects, *Krivanek, Ahn and Wood* 33 (1990) 177

Instrumentation
Recent developments in electron-optical instrumentation and computer-aided design, *Mulvey and Tahir* 33 (1990) 1
Direct parallel detection of energy-resolved large-angle convergent-beam patterns, *Quandt, La Barré and Niedrig* 33 (1990) 15

Methods and techniques
On the calculation of electron microscope images of holes and spherical inclusions using the multi-slice method, *Scheerschmidt and Hillebrand* 33 (1990) 27

Elsevier Science Publishers B.V. (North-Holland)

Preface to scanning tunneling microscopy and related techniques, *Isaacson* 33 (1990) 65
Electrochemical deposition of molecular adsorbates for in situ scanning probe microscopy, *Nagahara, Thundat, Oden, Lindsay and Rill* 33 (1990) 107
Convergent-beam electron diffraction characterization of dislocations in GaS single crystals, *De Blasi, Manno and Rizzo* 33 (1990) 143
Multiple scattering correction by a direct convolution method for electron energy loss spectrum, *Wang* 33 (1990) 151
Three-dimensional interactive graphics for displaying and modelling microscopic data, *Basinski and Deatherage* 33 (1990) 167
Absorption and fluorescence corrections for X-ray analysis with large-solid-angle detectors: thin films and spheres, *Zreiba and Kelly* 33 (1990) 187
Experimental determination of the efficiency function of an X-ray detector using submicron spheres, *Zreiba and Kelly* 33 (1990) 199

New developments
Recent developments in electron-optical instrumentation and computer-aided design, *Mulvey and Tahir* 33 (1990) 1
TEM in-situ investigations of the crystallization behaviour of amorphous silicon thin films, *Reiche and Hopfe* 33 (1990) 41
The atomic force microscope: a tool for science and industry, *Gould, Drake, Prater, Weisenhorn, Manne, Kelderman, Butt, Hansma, Hansma, Magonov and Cantow* 33 (1990) 93
Representation of rotations by unit quaternions, *Harauz* 33 (1990) 209

Reflection electron imaging, reflection high energy electron diffraction
Comparison of surface step images in reflection electron microscopy and scanning reflection electron microscopy, *Banzhof and Herrmann* 33 (1990) 23
Observation of the graphite surface by reflection electron microscopy during STM operation, *Spence, Lo and Kuwabara* 33 (1990) 69
Electron diffraction conditions and surface imaging in reflection electron microscopy, *Yao and Cowley* 33 (1990) 237

Scanning tunneling microscopy
Preface to scanning tunneling microscopy and related techniques, *Isaacson* 33 (1990) 65
Observation of the graphite surface by reflection electron microscopy during STM operation, *Spence, Lo and Kuwabara* 33 (1990) 69
Practical applications of scanning tunneling microscopy, *Denley* 33 (1990) 83
The atomic force microscope: a tool for science and industry, *Gould, Drake, Prater, Weisenhorn, Manne, Kelderman, Butt, Hansma, Hansma, Magonov and Cantow* 33 (1990) 93
Scanning tunneling microscopy of the enzymes of muscle glycogenolysis, *Edstrom, Meinke, Yang, Yang and Evans* 33 (1990) 99
Scanning tunneling microscopy of planar biomembranes, *Fisher, Yanagimoto, Whitfield, Thomson, Gustafsson and Clarke* 33 (1990) 117
Scanning tunnelling microscopy of nucleic acids and polynucleotides, *Arscott and Bloomfield* 33 (1990) 127

Spectrometers, auxiliary apparatus
Direct parallel detection of energy-resolved large-angle convergent-beam patterns, *Quandt, La Barré and Niedrig* 33 (1990) 15

Surfaces, clusters, interfaces and particles
Comparison of surface step images in reflection electron microscopy and scanning reflection electron microscopy, *Banzhof and Herrmann* 33 (1990) 23
TEM in-situ investigations of the crystallization behaviour of amorphous silicon thin films, *Reiche and Hopfe* 33 (1990) 41
High-resolution electron microscopy studies of Nb/Al_2O_3 interfaces, *Mayer, Flynn and Rühle* 33 (1990) 51
Surface roughness studies in small particles using HREM, *Yacamán, Herrera, Tehuacanero, Gómez and Beltrán del Río* 33 (1990) 133
Improvement of resolution by convergent-beam illumination in surface profile images of high resolution transmission electron microscopy, *Mitome, Takayanagi and Tanishiro* 33 (1990) 255

Abstracts / Announcements / Book reviews / Comments / Editorials / Reports
Introduction to collection of papers dedicated to Prof. J. Heydenreich, *Bethge* 33 (1990) vii
Recent developments in electron-optical instrumentation and computer-aided design, *Mulvey and Tahir* 33 (1990) 1
Preface to scanning tunneling microscopy and related techniques, *Isaacson* 33 (1990) 65
New books, special issues..., *Hawkes* 33 (1990) 215
Special announcement 33 (1990) 226